

SECTION 16736
FIBER DISTRIBUTION UNIT

1. Description. Furnish and install Primary Fiber Distribution Units (PFDU) and Secondary Fiber Distribution Units (SF DU) in the individual traffic cabinets and communications closets within buildings as shown on plans.
 - A. Submittals. Provide the Engineer with all submittals identified in these specifications no later than two (2) weeks following award of the contract.
2. Materials.
 - A. General Requirements.
 - (1). PF DU. Utilize hardware within the primary hubs in support of the hub distribution system and the primary network. This point in the system allows the distribution of signals directly to the network electronics via a jumper cord/patch cord cable management system.
 - a. The PF DU is characterized by a modular, medium density construction.
 - b. Termination method for PF DU will be field termination of all inbound cable and patch cord connectivity to all outbound cables and network electronics.
 - c. PF DU will be mountable within a 19 inch rack or bay and have a typical dimension of 8 inch high by 19 inch wide by 18 inch deep.
 - d. PF DU hardware will be easily adaptable for bay routing of patch cords and cable.
 - e. Design hardware to allow for the side-by-side termination of all fibers without violating minimum bend radius requirements.
 - f. Each PF DU connector capacity will be 144 for SC connections, or 72 for ST connections if specified on plans.
 - g. All adapters used within the Network will be compatible with single mode SC connectors unless otherwise specified on the plans. Fiber Optic Adapters will be SC type unless otherwise specified in the plans. No plastic adapters will be allowed.
 - h. All PF DU hardware that will be accessible by unauthorized personnel will be lockable with an interior key lock.

- i. All PFDU Housing's will be made with front and rear locking options.
- (2). SFDU. Typically, the final distribution point within the network and located in the Controller Cabinet. These will be modular junction panels capable of being mounted on top of the pre-installed power strips in the cabinet.
 - a. The SFDU will be a modular design, 1 unit tall, 19 inch mountable, with 16 pre-drilled adapter ports minimum. The SFDU will have twelve pre-installed SC bulkheads, and a minimum of 4 open holes.
 - b. The SFDU will be capable of being mounted on top of the pre-installed power strips in the cabinet. The left side power strip occupies 3/8" between the racks. The right side power strip occupies 7/8" between the racks.
 - c. All adapters used within the Network will be compatible with single mode SC connectors, unless otherwise specified on the plans. No plastic adapters will be allowed.
- 3. Documentation

Submittals of catalog sheets, engineering drawings and specifications for all hardware items to be used on a project will be provided to the Engineer for approval prior to commencement of work.

Submittal includes catalog sheets, engineering drawings and specifications for all hardware items for engineer's approval.
- 4. Measurement. This Item will be measured by the number of primary or secondary fiber distribution units furnished and installed.
- 5. Payment. The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement" will be paid.
 - A. "Primary Fiber Distribution Unit" Per Unit
 - B. "Secondary Fiber Distribution Unit" Per Unit

END OF SECTION